UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,470	08/28/2003	Thomas E. Birkett	ABIOS.037A	6121

22896	7590	08/09/2005

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EXAMINER
SUAREZ, FELIX E

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/650,470	BIRKETT ET AL.
	Examiner	Art Unit	
	Felix E. Suarez	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _25 August 2004_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-31_ is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-31_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _28 August 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some * c)☐ None of:

       1.☐ Certified copies of the priority documents have been received.

       2.☐ Certified copies of the priority documents have been received in Application No. _____.

       3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
     Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION .

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-
(1) an application for patent, published under section 122(b), by another filed in the United States
before the invention by the applicant for patent, except that an international application filed under the
treaty defined in section 351(a) shall have the effect under this subsection of a national application
published under section 122(b) only if the international application designating the United States was
published under Article 21(2)(a) of such treaty in the English language; or
(2) a patent granted on an application for patent by another filed in the United States before the
invention by the applicant for patent, except that a patent shall not be deemed filed in the United
States for the purposes of this subsection based on the filing of an international application filed under
the treaty defined in section 351(a).

The changes made to 35 U.S.C. 102(e) by the American Inventors
Protection Act of 1999 (AIPA) do not apply to the examination of this application
as the application being examined was not (1) filed on or after November 29,
2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this
application is examined under 35 U.S.C. 102(e) prior to the amendment by the
AIPA (pre-AIPA 35 U.S.C. 102(e)).

1.   Claims 1-31 are rejected under 35 U.S.C. 102(e) as being

unpatentable over Yung et al. (U.S. Patent No. 6,909,974).

With respect to claim 1, Young et al. (hereafter Young) teaches a system

for integrating biological instruments that acquire data from biological samples

with analysis applications that analyze the data acquired from the biological

samples, the system comprising:

a registry containing protocol information for each of the biological

instruments and the analysis applications (see col. 4, lines 44-56 and col. 5, lines

17-42); and

an applications manager that communicates with both the analysis

applications and the biological instruments wherein the applications manager has

access to the registry and upon receiving instructions to have a biological

instrument acquire data from selected biological samples and provide the sample

data to selected analysis applications (see col. 5, lines 17-29), the applications

manager retrieves the protocol information from the registry and directs

parameters to be configured for the biological instrument such that the data

captured by the biological instrument is made available to the analysis

application in a suitable format (see col. 5, lines 55-59 and col.17, lines 10-47).

With respect to claims 2 and 13, Young further teaches comprising a

messaging service associated with the applications manager that provides

messages to the selected analysis applications when the biological instrument

has captured to the data to thereby induce the analysis application to acquire the

sample data for subsequent analysis (see col. 5 line 60 to col. 6 line 4 and col. 6,

lines 32-52).

With respect to claims 3 and 14, Young further teaches that, the

messaging service is a broadcast message service that broadcasts signals to

each of the analysis applications, which are recognized and processed by the

selected analysis applications to thereby initiate sample analysis using the

acquired data (see col. 7, lines 1-20 and col. 16, lines 14-17).

With respect to claims 4, 15 and 23, Young further teaches that, the

protocols contained within the registry include format protocols for each analysis

application defining the format of the data that the analysis application is to

receive (see col. 7, lines 43-57 and col. 10, lines 45-56).

With respect to claims 5, 16 and 24, Young further teaches the protocols

further include parameters defining: die colors supported by the analysis

application, sample types compatible with the analysis application, size standard

files compatible with the analysis application, and analysis protocols for the

analysis application (see col. 17, lines 10-28).

With respect to claims 6 and 17, Young further teaches comprising a user

interface associated with the applications manager that allows a user to perform

functions including: viewing or defining status of the system, viewing or defining

status of individual instruments, viewing or defining status of individual analysis

applications, viewing or defining run completion times, viewing or defining

instrument operation queues, viewing or defining application operation queues,

and viewing or defining users associated with selected process runs (see col. 11
line 39 to col. 12 line 5).

With respect to claims 7 and 25, Young further teaches comprising a user
interface associated with the applications manager that allows a user to define a
sample run comprising a series of operations to be performed in connection with
one or more samples; the operations further comprising instrument operations
and analysis application operations (see col. 11 line 39 to col. 12 line 5).

With respect to claim 8, Young further teaches comprising a database
having stored therein records of the location of samples available for analysis by
the system (see col. 17 line 65 to col. 18 line 14).

With respect to claims 9, 18 and 27, Young further teaches that, additional
analysis applications and instruments can be incorporated into the system by
registering an associated protocol within the registry and configuring a suitable
plug-in to facilitate communication between the applications manager and the
analysis application or instrument to be incorporated into the system (see col. 15,
lines 26-43 and col. 16, lines 14-17).

With respect to claims 10, 19 and 28, Young further teaches that, each
instrument is associated with a plug-in suitable for capturing data generated by

the instrument and forwarding the data to other components within the system

(see col. 16, lines 5-17).

With respect to claims 11, 20 and 29, Young further teaches the plug-in

components and the analysis manager comprise software based daemons (see

col. 5, lines 29-42).

With respect to claim 12, Young teaches a system for integrating a

plurality of biological data acquisition instruments that obtain data from samples

with a plurality of data analysis applications, the system comprising:

a plurality of instrument components respectively associated with the

biological data acquisition instruments (see col. 4, lines 44-56 and col. 5, lines

34-41);

at least one registry containing instrument protocols for each of the

plurality of instrument components and protocols for each of the data analysis

applications (see col. 10, lines 45-67); and

an applications manager that communicates with the plurality of

instrument components and the plurality of data analysis applications, wherein

the applications manager has access to the at least one registry (see col. 5, lines

17-42) and includes an associated user interface such that a user can program a

series of operations associated with a biological analysis by selecting the

samples to be analyzed, selecting the instruments from the registry to process

and capture the data from the samples, and selecting the analysis applications

from the registry to receive and process the data (see col. 11, lines 39-59);

wherein additional instruments and additional analysis applications can be added

to the system by registering the additional instrument component protocols and

the additional analysis application protocols in the registry (see col. 16, lines 5-

18).

With respect to claim 21, Young teaches a system for integrating a

plurality of biological data instruments that obtain data from samples with a

plurality of discrete data analysis applications, the system comprising:

a plurality of instrument components respectively associated with the

biological data instruments (see col. 4, lines 44-56 and col. 5, lines 34-41);

at least one registry containing instrument protocols for each of the

plurality of instrument components and data protocols for each of the data

analysis applications (see col. 10, lines 45-67) wherein the protocols include a

messaging protocol (see col. 7, lines 43-57);

a data structure containing information describing a plurality of biological

samples (see col. 2, lines 9-21); and

an applications manager that communicates with the plurality of

instrument components and the plurality of data analysis applications via a

standardized communications protocol (see col. 7, lines 43-57), wherein the

applications manager has access to the at least one registry and the data

structure and includes an associated user interface such that a user can program

a series of operations for performing a biological analysis via the user interface

such that particular biological samples are processed by selected instruments

and upon completion of the processing of samples the data can be made

available to the data analysis application for analysis (see col. 11, line 39 to col.

12 line 1), and wherein the applications manager automatically makes the data

available to the data analysis application by sending a standardized

communications signal to the data analysis application protocol indicative of the

location of the data (see col. 7, lines 45-55 and col. 16, lines 5-17).

With respect to claim 22, Young further teaches that, the applications

manager broadcasts messages to each analysis application which are

recognized and processed by a selected analysis applications to thereby initiate

sample analysis using the acquired data (see col. 6, lines 32-52).

With respect to claims 26, Young further teaches comprising a plate

database having records of each plate of biological samples available for

analysis by the system (see col. 6, lines 2-5 and col. 10, lines 53-56).

With respect to claim 30, Young teaches a system for integrating a

plurality of biological data instruments that obtain electronic data from physical

data samples with a plurality of discrete electronic data analysis applications, the

system comprising:

a plurality of instrument components respectively associated with the

biological data instruments (see col. 4, lines 44-56 and col. 5, lines 34-41);

at least one registry containing instrument protocols for each of the

plurality of instrument components and the protocols for each of the electronic

data analysis applications (see col. 10, lines 45-61);

a plate data structure containing information indicative of a plurality of

biological samples (see col. 6, lines 2-5 and col. 10, lines 53-56); and

an applications manager that communicates with the plurality of

instrument components and plurality of discrete electronic data analysis

applications (see col. 10, lines 45-56), wherein the applications manager has

access to the at least one registry and the plate data structure (see col. 10, lines

57-67) and includes an associated user interface such that a user can program a

series of biological analyses by selecting the samples from the plate data

structure, selecting the instrument from the registry to capture the electronic data

from the physical data samples, and selecting the analysis applications from the

registry to receive the electronic data (see col. 11, lines 39-63), wherein

additional instruments and additional analysis applications can be added to the

system by registering the additional instrument component protocols and the

additional analysis application protocols within the registry (see col. 16, lines 5-

31).

With respect to claim 31, Young teaches a system for integrating a

plurality of biological data instruments that obtain electronic data from physical

data samples with a plurality of discrete electronic data analysis applications, the

system comprising:

a plurality of instrument components respectively associated with the

biological data instruments (see col. 4, lines 44-56 and col. 5, lines 34-41);

at least one registry containing instrument protocols for each of the

plurality of instrument components and the protocols for each of the electronic

data analysis applications (see col. 10, lines 45-61) wherein each protocol

includes a messaging protocol (see col. 7, lines 46-57);

a plate data structure containing information indicative of a plurality of

biological samples (see col. 4, lines 44-56); and

an applications manager that communicates with the plurality of

instrument components and plurality of discrete electronic data analysis

applications via a standardized communications protocol (see col.10, lines 45-

56), wherein the applications manager has access to the at least one registry and

the plate data structure (see col. 10, lines 57-67) and includes an associated

user interface such that a user can program a series of biological analysis via the

user interface such that particular biological samples are processed by particular

instruments and upon completion of the processing of particular biological

samples the electronic data is made available to the data analysis application for

electronic analysis (see col. 11, lines 39-63), wherein the applications manager

automatically makes the data available to the data analysis application by

sending a standard communications signal to the data analysis application

protocol indicative of the location of the biological data (see col. 10, lines 45-56).

Conclusion

Prior Art

2.   The prior art made of record and not relied upon is considered

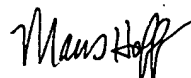pertinent to applicant's disclosure.

Kwong [U.S. Patent No. 6,917,829] describes an analytical service

provider medical system.

3.   Any inquiry concerning this communication or earlier

communications from the examiner should be directed to Felix Suarez, whose

telephone number is (571) 272-2223. The examiner can normally be reached on

weekdays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone

numbers for the organization where this application or proceeding is assigned is

571-273-8300 for regular communications and for After Final communications.

July 29, 2005

F.S.

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